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Editorial

"You cannot be wise," said a great philosopher, "without some basis of knowledge, but you may easily acquire knowledge and remain bare of wisdom." In our colleges and universities even the acquirement of knowledge is hardly possible. What we are compelled to do by our class-room lectures is to pack ruthlessly the pupil's mind with scraps of barren information. The result can easily be guessed. Few can survive the car of Juggernaut. The habit of active thought, the freshness of mind and the alertness of intellect are mercilessly smothered. And we get a multitude of young men stunted in growth and broken in hearts. The sad performance of our students when they go out into the wider world to do the battle of life is a tribute to our educational failure.

While we deal with pupils we are apt to forget that we are dealing with sensitive living organisms. Our true task is to excite them towards self-development and help them in getting a coherent view of the world *and a proper understanding* of the life we live. The natural cravings of the youth are for expansion. When we seek to impose on them an incoherent mass of factual information these cravings get choked and all urge for self-development is stilled.

While we are aware of the magnitude of this all pervasive soul-killing evil, nothing constructive in the way of reform has been seriously attempted to tackle the problem. *In all fairness we cannot* lay the blame at the door of the teacher. He is as much a victim of the system as his pupils are. He is judged not so much by his ability to quicken *the minds of his students and to impart* wisdom as by his dexterity in divining questions that are likely to be asked at the next external examination and in preparing, as best as he can, his students for that examination. He is faced with a curious paradox. If he really seeks to teach subjects and impart wisdom he is bound to be a failure in the task of successfully preparing his pupils for the examination ; if on the other hand, he seeks to enable his students to learn all questions that are likely to be asked at the examination, he cannot hope to impart real knowledge and wisdom. Naturally, the teacher on pain of losing his job, doles out information rather than deal in knowledge or wisdom.

Even that information is disjointed, for he has to dodge the lack of time and finish the stipulated course in due time. In this overhaste to carry the students through the overburdened course the real purpose of education is defeated. The student fast loses his interest in the subject he is learning and soon becomes a passive recipient of a certain amount of inert knowledge necessary for getting through the examination. The teacher gets bored and all his initiative is killed. Educational institutions, on pain of extinction, take all steps to encourage this devitalising process. For their existence is justified by the percentage of passes in various examinations. They have little freedom to organise education on proper lines within the limits of their resources. The unimaginative examination system works as an overpowering drag. They must train their boys for various examinations or they are doomed. Such is then the character of our education which passes as the hallmark of cultured mind. We have said all these not because we like denouncing established thigns.

Our purpose is to point out that the entire educational system is suffering from a deep-seated malady. Nothing short of drastic remedies can hope to cure it. But pending long-term remedies we can do much to mitigate the evil. Take, for example, the question of examination. Here we have an indomitable love for startling the student. More often than not questions are asked in examinations not with a view to testing what he has learnt and assimilated but with a view to testing his ignorance. The result is that a large element of uncertainty creeps in the examination. Whether or not a student will do well in it becomes largely a matter of accident. With a little bit of restraint on our part we can avoid this uncertainty. We can easily increase the number of questions and spread them over a fairly large number of topics in the subject concerned, yet judge the capability of a student. The object is to see whether he can understand and establish relations between things and not how much information he has managed to learn by heart. Besides, the practising teacher of the subject must be associated with the framing of questions to be asked of the students in various examinations. An external paper-setter is not likely to know the standard that a student is required to reach as much as the actual teacher is likely to know. More often an external paper-setter is apt to be carried away by his likes and dislikes. Of course there are exceptions. But these exceptions do not invalidate the general rule.

In the field of curricula in different subjects there is also much room for immediate improvement. Complaints are often made that

in most subjects much of what is included in the prescribed syllabuses is out-of-date, superfluous and generally futile. It is curious that while our knowledge in Science and Arts is increasing at a very rapid speed and while we find it difficult to fit our advancing culture into existing overloaded curricula, we go on wasting our precious time in teaching much that is useless. Reason is not far to seek. The present syllabuses have grown out of the practice of tacking on at the end of old curricula new additions to our knowledge in different fields of studies. We have done this mechanically without any attempt at coherence.

Time has come to break this unimaginative practice. We have to cut down all unnecessary bits of information so that enough room may be made for new acquisitions in various branches of knowledge. We must remember that if we are to ensure the range and depth of understanding we must be prepared to reduce the burden of syllabuses. There is plethora of subjects and topics in a world of advancing knowledge. However we may desire to master them all lack of time makes it an impossible adventure. While there must be a dominant emphasis in a particular branch of study we must be satisfied with the fundamental principles of others. If syllabuses are drawn up with due respect to this and if the amount taught is cut down by dropping out what is unnecessary and out-of-date we will get a better view of the world. At the same time there will be far more stimulation of imagination and far more evocation of interests and curiosity in the pupil. Education will then get over its weariness and pain.

S. K. S.

Education For Commerce at Secondary Level

Prof. LOKARANJAN DASGUPTA

As a part of the programme for education of adolescents, provision has been made in India for teaching the following commercial subjects in higher secondary schools : (a) Elements of commerce (b) Commercial Geography including economics and civics ; (c) Book-keeping and (d) Shorthand and typewriting. The pupils electing the "commercial" stream of the course will study the first two subjects and one of the latter two along with a number of other subjects, namely, languages, social studies, general science including mathematics and possibly a craft. The pupils may flow to the commercial stream after eight years of schooling at the age of 14 and the duration of the higher secondary Commerce course would be three years. Though the need of vocational education from an adolescent age was emphasised by several Committees since the Hunter Commission's Report of 1885, the present programme based on the Mudaliar Commission's recommendations would really be the first determining move in this direction. The All-India Council for Secondary Education has published a draft syllabus in most of the subjects including those prescribed for the commerce stream. The draft syllabuses are intended to be only suggestive and the State authorities are expected to finalise these "in the light of the special needs and circumstances of their areas." In the introductory notes, the framers of the draft syllabuses only mention that "the standard aimed at in these syllabuses is that of the present intermediate" and that "the syllabi relate to the age group 14-17."

The Secondary Education Commission while recommending the introduction of diversified vocational streams at the higher secondary level, have rightly stressed that "much will depend upon the details of the curricula and the methods of handling it." The drafting of the syllabuses has been the preliminary step to give precision and direction to the ideas implicit in these observations. However good may be the syllabuses these cannot be sufficient for any effective programme for

commerce education and for the matter of that any vocational education. The effectiveness of any programme would largely depend upon three things, namely—

(i) Clarity of ideas about the specific purpose or aim of such stream and of each subject included therein ;

(ii) Evolution of effective methods of teaching and their application in practice ; and

(iii) Availability, recruitment and training of teachers.

All these three facets are really interdependent and involved in detailing the curriculum and syllabuses. It would have been better if the All-India Council for Secondary Education had offered some guidance in respect of these pre-requisites along with their draft syllabuses. It is to be admitted that very little thought has been so far given to evolve effecttive methods of teaching technical and commercial subjects. In fact, our ideas about the very object of technical and commercial education lack precision. There is hardly any literature available in the country which may be of help to the teachers of commercial subjects to teach successfully. There is absolutely no arrangement for the training of teachers in technical and commercial subjects. Obviously, it is not feasible to deal with all the problems and issues that require detailed examination for their effective tackling in the course of a brief article. Some of these are posed here just to provoke discussions on them.

Aim :

While recommending vocational streams within the higher secondary school curriculum, the Mudaliar Commission observed that "the educational programme will not be narrowly vocational, but will have a definite vocational bias." Clearly such an aim is based on the recognition of three modern educational thoughts. First, there is no antithesis between "general" and "commercial" education and "practical" or "vocational" or "technical" education. Second, technical and commercial education subjects can be used as instruments for developing the mental faculty of the pupils and thereby may be as educational as the so-called liberal subjects. Lastly, there must be sufficient emphasis on general education in the secondary school curriculum directed to "development and discipline of faculty by the communication of knowledge."

In this integration approach to the liberal and vocational education, we have the support of many modern thinkers on education. Prof. Whitehead observes in his book *The Aims of Education and other*

Essays (p. 74) that "the antithesis between the technical and liberal education is fallacious. There can be no adequate technical education which is not liberal, and no liberal education which is not technical; that is, no education which does not impart both technique and intellectual vision. In simple language, education should turn the people to something he knows well and can do well. This intimate union of practice and theory aids both. The intellect does not work best in vacuum." The Mudaliar Commission also rightly stressed another aspect of the issue, namely, "that the intellectual and cultural development of differrent individuals takes place best through a variety of media, that the book or the study of traditional academic subjects is not the only door to the education of the personality and that, in the case of many—parhaps the majority—of the children, practical work intelligently organised can unlock their latent energies much more successfully than the traditional subjects which address themselves only to the mind, or worse still, the memory." (p. 36) The Commissioners for Secondary Education in Britain observed as far back as 1895 that "all education is development and discipline of faculty by the communication of knowledge and whether the faculty may be eye or hand or the reason and imagination and whether the knowledge of nature or art or science or literature, if the knowledge be so communicated as evoke and exercise a disciplined faculty, the process is rightly termed education." Judged on these criteria, it may be easily shown that the commerce subjects included in the secondary school course can be made thoroughly educational. For example, in teaching book-keeping, the analytic faculty can be immensely sharpened if the subject is carefully taught. The modern approach to teach book-keeping in its analytic and interpretative aspects has thus made the subject as educational as arithmetic. In the teaching of the "elements of commerce" most of the objects which are sought to be realised through social studies can be secured. The Mudaliar Commission stressed that "the curriculum must be vitally and organically related to the community life." A skilful handling of a course in "elements of commerce" can best impress upon the pupils this importance of community life in modern society. Similarly, in the teaching of shorthand, which is considered to be a mere skill subject, there is an admirable inculcation of discipline, concentration, patience, persistence, etc. In this skill, the words are heard by the ear and interpreted by the brain and then translated into visual form by the hand. Such simultaneous functioning of aural, mental and visual faculties as is involved in the learning process of shorthand must be recognised as of sufficient educational value

to make the subject an academic one. Lastly, the emphasis of the Mudaliar Commission that secondary education for commerce must be only vocationally biased and not narrowly vocational is also supported by the protagonists of technical and commerce education in other countries. The Scottish Education Department in its booklet on the commercial subjects in secondary schools, stresses that "the function of commercial education is not merely to satisfy the vocational need of the pupils but also to foster an understanding of the economy of the community in which they will be called to play a part. In commerce no less than in industry, it is of primary importance that prospective entrants should have a sound general education." Mr. Graham Savage of the London County Council in his pamphlet on "Commercial Studies in Secondary Schools" explains that "the essential function of a secondary school commercial course should be to give the pupils a knowledge of the background of commerce and of the way it affects the life of the community ; the pupil's interest in commerce cannot, therefore, be confined to subjects which are specifically commercial, but will influence their approach to other subjects." The commercial curriculum in secondary education in Switzerland and Norway, are also found to include sufficient number of the so-called general subjects.

At the same time, it must be kept in view that in our course in commerce for higher secondary education, we shall have to correlate the programme with the needs of the country and of the individual recipients. The Mudliar Commission itself observed that at least 75 per cent of the recipients of the secondary education would go for vocational pursuits at the conclusion of their education. Therefore, our course must be able to impart such knowledge and skill as may enable a pupil at 17 plus to have some qualities of marketable value. The Second Five-Year Plan envisages that "the requirements of teachers, workers and national extension and community project areas, co-operative personnel, revenue administrators, technical and supervisory personnel, in the industry, agriculture and other fields of development have to be made mainly from the age group 14-17 years." There may be many in the country who may not agree with such a view, but all the same, we should be aware of such an approach of the Planning Commission in formulating our programmes. From the individual recipient's viewpoint and of their parents also, some amount of marketable or utilitarian value has to be secured through our commerce course at secondary level. The very purpose of diversification and introduction of vocational courses would not be realised if we develop commerce subjects purely on the basis of their contribution to mental development. The employers of

the junior employees at their adolescent age of 17-18 years should not, however, expect ready-made products immediately fit to take up their jobs without any initial period of training which can best be given only by them. They can, at best, require the following three things from their junior recruits—(a) a background knowledge and understanding of the business structure and the "way it fits into the life of the community", (b) an ability to think clearly, speak clearly and receive things with sincerity of purpose and earnestness for learning and (c) skill or knowledge in one or two specific office arts. The curriculum of the proposed commerce stream should enable the recipients to meet these expectations.

Lastly, our secondary education in commerce should be able to stimulate the recipients to go in for further higher education. One test of successful education at secondary level is decidedly its capacity to provide such stimulus. There must be wider scope for part-time and evening education in various branches of industry, trade and commerce, and there should thus be lateral and vertical flexibility in the secondary level of commerce education correlated to such specialised higher education in commerce.

To sum up, therefore, the aim of secondary commerce course is to be a matter of nice balance between three objectives, namely, (a) education *through* commerce subjects; (b) imparting knowledge and skill of some marketable value; (c) stimulation for further and higher education for commerce. In any case, we should try to concretise our ideas about the aim of commerce education in the new programme so that it may not be possible in future for anybody to repeat the charge that was levelled against the B. Com. course by the Radhakisan Commission that "the objects of these courses are not clear."

Method and Approach :

In tackling the problems and issues involved in the evolution of methods of teaching different commerce subjects, it may be worthwhile to note the distinction that was drawn between "vocational education" and "vocational training" by the Carr-Saunders Committee of Britain in 1949. By "vocational education" the Committee meant "the study of the underlying principle and the background of commerce combined with such a treatment of certain subjects normally included in general education as would show their vocational bearing and thus stimulate the interests of the students." By "vocational training" the Committee meant "training in the skills and techniques

of commerce or of allied professions for the purpose of making competent practitioners." In simpler language, training is a process of instruction, drilling and practising some one in a skill. The purpose may be just to learn the "how" of a skill. For example, training in the mechanistic aspect of book-keeping or typing, means drills in how to write the book of account-records or how to type a matter in a rote way. Education, on the other hand, must involve the "why" element in the process of learning and must be able to develop the recipients' aptitudes and abilities. The object of education is not limited to a period or a purpose, it is almost a life-long process. Without much dilating on this subject, it may be stated that if we agree to the triple objects of our secondary level of commerce course, we shall have to accept that there must be both education and training in it. The Carr-Saunders Report referred to before, seemed to be of the view that at the secondary level, commerce education should be based on the ideals of "vocational education" and the training element should be introduced in what is termed as "further education" in Britain that is, education after the age of the compulsory school-leaving age of 15. Our programme for secondary education in commerce will extend to the age level of 17 plus and, therefore, it would correspond to what may be designated as post-secondary junior level of commercial education in Britain imparted by the technical and commerce colleges. At this level of commerce education in Britain, the training element plays a significant part in the teaching methods. To avoid confusion, it should be noted here that by training we do not mean necessarily work in the offices. Much of the training process as explained above, can be introduced within the educational institution by adoption of suitable techniques of teaching. It needs also to be appreciated that whether a teaching process becomes educational or only instructional training, depends much upon the teacher and the technique he adopts. It appears that the learning of reading, writing and arithmetic basically starts as training and subsequently develops into education. Who can deny that in many of our schools arithmetic is taught more through a training process and less as an educational process. Swotting up the multiplication table is to equip the pupil with a tool. Very often arithmetic is taught by exercising the pupil in meaningless sums. It is training and yet the subject is considered as educational. Similarly, if English is taught with eternal swotting over syntax, it is training and yet the language is considered to be a core subject of educational value. On the other hand, 'elements of commerce' may be taught to develop an

attitude of mind to the social experiences of the pupil, to correlate the complex process through which the humanity at large is interlinked in modern society and to explain how and why the individuals and their institutions function in one way or the other. In teaching book-keeping, you may simply degenerate it into mere training by keeping the pupils solely on the working of exercises or you may induce him to understand the principles and interpretation of what he is doing. In this manner, it can be shown that there must be both training and education in almost every subject whether it is styled as vocational or general, and much depends upon *how* you teach rather than *what* you teach.

There still, however, exists in the country a lamentable unawareness of the aims and methods of vocational education and thus of commerce education with resultant gibes at utilitarianism. It becomes therefore incumbent on those engaged in commerce education to take a special care so that the methods of teaching may maintain a proper balance between education and training. There is also a second reason for which a commerce teacher needs be on guard against preponderance of training element in teaching commerce subjects. The employers often take a narrow view of commerce education in expecting that they should be supplied with finished products skilled in the office arts and that at an adolscent age with flexible minds. Such an attitude makes the training element of commerce education more readily marketable than the educational element, and as a result the pupils and their guardians would expect of the commerce schools to provide training in one or the other commerce subjects more than anything else. As a result of all these, develops a tendency to degenerate commerce education even at secondary level into mere training in one or other skills. This tendency has been very much seen in Britain. The Carr-Saunders Committee and the educational authorities in Britain have spotlighted this degenerating tendency in commerce education at secondary level in that country during recent years.

Subject to this basic approach in respect of method development in teaching commerce subjects, we must be able to evolve special methods of teaching different commerce subjects. Syllabuses should be to us nothing more than the contents of a book. The purpose of the syllabus will be merely to provide a general guidance. For each subject we should be able to evolve methods more or less on the following pattern :

(a) Aim of the course in the subject ; (b) the best method for introduction and initial development of the subject ; (c) evolution of teaching techniques to be adopted e.g., inductive or deductive processes,

utilisation of questioning in the process, adoption of group method of pupil's participation, utilisation of Project method etc.; (d) method for organisation of demonstration and practice lessons; (e) introduction of practical bias in the teaching process by drawing illustrations from practical field but from within the experience of pupils; (f) use of mechanical and visual aids; (g) use of text books and the methods for supplementing text books matters from *current affairs of the* business world; (h) testing and marking schemes for assessment of progress of the pupils; (i) methods of correlating the teaching of the subject with other subjects of the course in the teaching process.

The development of such special methods would perhaps constitute the corner-stone of our success in the programme for commerce course at secondary level. Only on the development of special methods for each subject we shall be able to strike out a balance among the different subjects that have been included in the commercial stream of the course, in respect of brass-tack matters like allocation of time, division of topics among teachers, co-ordination of their work and so on.

There is also another aspect of this method development and that relates to the issue of approach and method that should be adopted in teaching the general subjects which the pupils of the commercial stream would have to study. It is to be appreciated that the pupil's interest in commerce cannot be confined to subjects which are specifically commercial, it will influence the approach to other subjects. For example, the teaching of English may have to be correlated to the teaching of short-hand, and elements of commerce. Similarly, the teaching of geography and history may have to pay greater attention to the economic and commercial aspects than in a purely academic course.

Particular care may have to be taken in the methods of teaching shorthand and typewriting, because the teaching of these two subjects in our country has been most neglected so far. Expansion of vocabulary and punctuation through shorthand and typewriting, use of practical matter for dictation, and correlation of shorthand dictation and typing to office practices and book-keeping, and the growing emphasis on aiming at acceptable production tests instead of mere mechanical speed, are some of the attractive features in the modern methods of teaching shorthand and typewriting that are adopted in Western countries. A new outlook and a new status are warranted for these two subjects. An effective education in the office arts along with a background knowledge of English language, office routine and elements of commerce, may contribute to an increase in the operative efficiency in the Indian offices

and at the same time may better fit the pupils for earning a living. An intensive course of education, and training may be necessary after the secondary course, to produce such workers.

In the teaching of book-keeping in India, the mechanistic aspect may continue to remain as important as principles or interpreting aspect for many years to come. In Britain, the latter aspects are being increasingly emphasised and that may be quite suitable for that country in view of the increasing mechanisation of book-keeping and accounting in that country.

Availability and Training of Teachers :

All programmes and efforts for an effective commerce education may founder on the rock of non-availability of competent teachers. Though there has been commerce education in the country, of one sort or other, for the past many years and although we hear so much now-a-days about the upgrading of commerce courses, very little is heard of the methods of teaching and about the education and training of teachers. If we are to give a confident start to our programme of commerce education at secondary level immediate arrangements should be made for the training of teachers for teaching the commerce subjects. From what has been indicated before, it should be clear that there is need for special training of technical and commercial teachers.

The Mudaliar Commission has generally stressed the need for a comprehensive teachers' training programme, but obviously enough, has provided us with little guidance about the special training that is needed for commerce teachers. The All-India Council for Technical Education recommended in 1954 that arrangement should be made for the training of technical teachers (including commerce teachers) during the period of the Second Five Year Plan. The Plan envisages the training of 500 Degree teachers and 1000 Diploma teachers for multi-purpose and technical schools. Thus, we are not as yet aware of any programme for the training of commerce teachers.

While recommending the teaching of vocational subjects including commercial subjects, in the higher secondary schools, Mudaliar Commission recommended that "the teachers should be graduates in the particular subjects and should have received training in teaching it." There is up till now no recognised qualification in shorthand and typewriting comparable to graduate standard and there is no arrangement for teachers' training in any of the commerce subjects. A special responsibility for the technical and commercial teacher is, however, envisaged in the following observation of the Mudaliar Commission : "A good

teacher should always be able to exploit the educational possibilities implicit in the (vocational) subjects. There is no doubt that the so-called technical subjects are of considerable cultural value which should be fully exploited. In fact, with great advances during the last hundred years in science and technology, the concept of culture itself has become wider and more comprehensive ; science as technique is as much a part of it as the older discipline of liberal studies. It is this approach which will have to be adopted in our secondary instructions distinguishing them from the purely vocational schools." (p. 85).

The MacNair Committee of Britain dealt more closely with the special problems of training technical and commercial teachers as far back as 1944 and there are in England today three special colleges for the training of technical and commercial teachers. The training provided by these institutions is principally method-training rather than matter-training. In Scotland emphasis is laid on education in the suject matter also within the training course. In England it is stated that during the training courses many trainee-students are guided in seeking to extend their academic qualifictions. Education and training in special methods in the different commerce subjects constitute the principal part of the teacher-training programme in Britain and quite rightly. About 12 weeks in a total course period of one year are devoted to teaching-practice when the trainees go to various technical and commerce colleges for actual teaching and to observe the teaching of commercial subjects.

One issue that is often raised in respect of the qualification for technical and commercial teachers relates to their industrial or commercial experience. There seems to exist two views about it in Britain.* One school thinks that "since most of the teaching in technical and commercial institutions deals with fundamental principles, the value attached to practical experience in workshops and offices can be exaggerated and in any case many teachers who are familiar with modern practice seem to make no use in the class room of this experience." The other school seems to be of the view that there should be some business experience and the writer feels convinced that for effective teaching in commerce subjects, the teacher should have at least a 'feel' of a business house. The MacNair Committee, however, stressed that technical and commercial teacher must have "an intimate acquaintance with his subject in its industrial or commercial setting, if possible through the practical experience of having played a significant part in industry and commerce," in addition to other general qualifications that every teacher should possess. Under Indian conditions, it may not be feasible immediately to obtain

graduates who may be trained to become teachers of commercial subjects, particularly of shorthand and typewriting, on a whole-time basis in a higher-secondary school, unless the status and the pay-scales are suitably upgraded. The University and Government should immediatly try to evolve some schemes almost on emergency level for the training of technical and commercial teachers. Part-time and full-time courses may be pioneered in co-operation with some commerce colleges and teachers training colleges.

Conclusion :

Many criticisms are levelled against the ineffectiveness of our educational system. Most of these are so uninitiated and amateurish that a teacher gets very little guide from such criticisms. All the same, if we are to claim as professionl teachers, we must be able to evolve correct methods of teaching our subjects. There is no gainsaying the fact that our teaching suffers from lack of clarity of purpose and teachnique, and there is some sort of a rot in our educational institutions. It is true that our teachers suffer from various handicaps including the pitiable financial conditions. But the problem is whether our educational reforms should completely await the improvement in our financial condition or we shall try to do our best within our limited means and thus to make our contributions to the development of the country. A better professional attitude and work in teaching may by itself contribute to the betterment of financial conditions of the teachers, and, therefore, no unfortunate cynical attitude should be taken in talking about the improvement of the methods of teaching.

University Education in India*

Prof. Nirmal Chandra Bhattacharyya

I am thankful to the Council of the All-India Federation of Educational Associations for having elected me President of the University Section of the present conference. I do not hesitate to call this sectional meeting a momentous one. University education in India is passing through a period of transition. Educationists and educational administrators of India are busy reconstructing higher education in the country in order to meet the new demands and altered needs of free India. Our deliberations, therefore, are of significance in as much as they may exercise some influence on the future pattern of University education.

Hundred Years of University Education

I call this session a momentous one for another reason. In two months from today, on the 24th of January, 1957 India will have witnessed the completion of a century of modern University education. On the 24th of January, 1857 the Bill for the establishment of the University of Calcutta, known as the Act of Incorporation (Act II of 1857) received the assent of the Governor-General. The inauguration of the first University in Calcutta was followed by the establishment of two other Universities at Bombay and Madras the same year. The celebration of the centenary of these three Universities marks the completion of a period in our educational history.

A hundred years is not a long period in the history of Universities. The University of Nalanda lasted in all its glory for close upon eight hundred years. Paris which earned in the middle ages the designation of the 'Mother of Universities', was founded in the 12th century. Oxford and Cambridge have completed seven hundred years of continued existence. The three oldest Universities in India are indeed babies in the family of the senior Universities of the world. But I believe a hundred years is a sufficiently respectable age to merit a stock-taking of experiences, achievements and failures. Before I come to an appraisal of the work of a century I propose to advert very briefly to certain aspects of the history of University education in India.

English Education in India

The history of University education cannot be divorced from the first introduction of English education in India. It is supposed

*Presidential Address delivered at the University Section of the 31st Session of All India Educational Conference held at Jaipur.

in certain quarters that the English System of education in India was imposed on an unwilling people by the dominant political power. The history of English education, however, reveals that the demand for European knowledge came first from the people of the soil. There was, of course, as there was bound to be, a block of orthodox opposition. But the greatest Indians of the nineteenth century, in all parts of British India, including Raja Rammohan Ray, stood for a harmonious blending of oriental and occidental learning and welcomed the new system that political reverses had brought to their door. The demand became vocal and persistent as years went by. The Hindu College founded in Calcutta in 1817 was the fruit of the efforts of a band of Indians who were convinced of the value of European culture.

An examination of the curricula of study for the Hindu College of Calcutta and similar institutions in other parts of India which included humanistic subjects and sciences will also dispel the popular belief that the British policy of education in India was designed to instil a 'slave mentality' and create an army of clerks who might work the offices of the British Government and of the British business firms. That English education would help political and economic exploitation of India was not forgotten by the British. But the contention that the sole aim of British educational policy was to create a body of slavish clerks is rather onesided and perverse.* Moreover, at no stage of the history of English education in India did the British administrators seek to inhibit the learning and culture of the people. On the contrary they created additional opportunities for the study of the treasured lore of the orient and established specialised institutions for the purpose, like Madrassahs and Sanskrit Colleges. Besides, it was the Englishmen, like Warren Hastings and Sir William Jones, who initiated oriental research through which the greatness of Indian cultural heritage came to the notice of the rest of the world. Therefore, the charge of deliberate attempt on the part of the British administrators to effect a cultural conquest of India would appear to be equally untenable.

Raja Rammohan Ray, the pioneer of the English system of education in India, himself firmly rooted in the best traditions of his country, wrote to Lord Amherst as follows in 1823: "The Sanskrit system of education would be the best calculated to keep

*"Before proceeding further, we must emphatically declare that the education which we desire to see extended in India is that which has for its object the diffusion of the improved arts, science, philosophy and literature of Europe; in short European knowledge"—Wood Despatch, Paragraph 7.

this country in darkness. We want a more liberal and enlightened system of instruction embracing mathematics, natural philosophy, chemistry, anatomy with other useful sciences." It was very much in this spirit that Macaulay in 1835 wrote his famous Minute on English education in opposition to the 'classicists' who supported instructions in indegenous learning alone. The acceptance of this Minute by the Governor-General Lord Bentinck and his Council is an event of the greatest magnitude in the history of modern India. The famous Despatch of Sir Charles Wood to the Court of Directors in 1854 which has been rightly described as the Magna Carta of English education in India carried forward the ideas of Macaulay, developed a somewhat integrated educational policy and emphasised the necessity of establishing Universities with a view to the better propagation of European knowledge in India.

The foundation of the three Universities in 1857 was but the logical development of the policy formulated in the Wood Despatch. Perhaps it would not be incorrect to conclude that the incorporation of the Universities was a happy culmination of the pioneering efforts of men like Raja Ram Mohan Ray. From Ram Mohan Ray to Sir Charles Wood we notice an unmistakable continuity of policy which goes to establish this view.

Role of University Education from 1857 to 1947

During the century of University education that we have left behind kaleidoscopic changes have taken place in the social, economic, political and cultural life of the people of India culminating in the freedom of our motherland. What has been the role of our Universities in this changing panorama ? Have they functioned during the time as the supreme organ of culture of the nation ? In spite of the soul-killing handicap of political servitude that continued for ninety of the hundred years of University education in India, the contributions of the Universities old and new, towards the re-orientation of Indian life have not been negligible. An impartial historian will not perhaps hesitate to pass the verdict that the Universities have played a noble part in bringing about a cultural and mental revolution. This revolution resulted in a significant transformation of the mediaeval pattern of life and thought that encumbered the Indian people for nearly a century before the beginning of the modern age synchronising with the opening of the nineteenth century.

It will perhaps be admitted without reservation that the intro-

duction of University education and the study of European literature, philosophy and science led to a remarkable efflorescence of the human mind somewhat comparable to that witnessed in Europe during the period of the Renaissance. In the making of new India Indian Universities have exercised direct and indirect influences of an abiding character. The products of Indian Universities have for close upon a century consciously and unconsciously created, with certain limitations, through their life and work a new atmosphere and a new outlook on life. India's efforts for emancipation from political, economic and social serfdom culminating in the epic struggle of Mahatma Gandhi for total freedom are traceable to the spirit of humanism that University education in India generated. It is this faith in humanism that has kept alive a spirit of eager enquiry and intellectual questioning which supply the motive force of all progress and creative work in the fields of literature and philosophy, science and art, politics and social reform.

Universities are judged by world standards. Have we produced during the hundred years of University education in India alumni who can take their places with some of the best University products of other countries of the world ? Have the alumni of Indian Universities been able to contribute to the stock of world knowledge ? Judged from this point of view Indian Universities would not be found wanting. In literature and philosophy, in science and art, in historical research, in political and social reform the contributions of our University graduates may compare not unfavourably with the products of any centre of learning in the world. Beginning from the times of the famous novelist and first University graduate Bankim Chandra Chatterjee who has given us the national song *Bande Mataram* the Universities in India have produced many rspresentative men of creative ability. Neither can we forget the contributions of thousands of humbler men and women, products of our Universities, working quietly in different walks of life. After all the representative men of different periods in our history have but symbolised the ideas and urges of these very common men and women who are ordinarily forgotten by the traditional historian.

University education of the English type rescued India from the stagnation that overtook her in the eighteenth century. India ceased to be creative, lost her spirit of adventure and was given to meaningless idolisation of the past. On the contrary, in the seventeenth and the eighteenth centuries, Europe succeeded in securing marked improvement in positive sciences. The application of scientific

method to the productive system led to the industrial revolution in Europe. Emancipation of the human mind was an aspect of this revolution. While between 1750 and 1850 the Industrial Revolution in the West created the rationalistic modern mind, India hugged superstition and wallowed in her mediaeval backwardness. European liberalism and rationalism summarised in the principles of the French Revolution were introduced in India through the medium of English education and became the principal instrument of enlightenment of the age. The Universities and their products were the votaries of this ideal. It was this ideal that has been in operation in the movements for the political and social regeneration of India throughout the nineteenth and the twentieth centuries.

Future Ideal

A new vista of life has been opened up before Indians on the dawn of independence. The country is throbbing with new life and vigour. The new atmosphere in which we live today demands a dynamism hitherto undreamt of by us. The University Commission accepted the principles enshrined in the preamble to our constitution as an embodiment of the national ideal that Indian Universities should subserve. The principles are Justice, social, economic and political; Liberty of thought, expression, belief, faith and worship; Equality of status and opportunity; the dignity of the individual and the unity of the Nation, and finally Democracy. The Radhakrishnan Commission warns the Universities against pedantic imitation of the past and asserts that if our cultural life is to retain its dynamism it must give up idolatry of the past and strive to realise new dreams. An avid desire to profit by the best that the west has to offer, informed by a spirit of scientific synthesis, close contact with the peace-loving peoples of the world, realisation of a socialistic pattern of society are certain other features of national endeavour which have to be kept in view by the Universities in order that they may not be deflected from the right path in a world of bewildering change and ideological conflict. The Universities will have to function in the future as a centre for the diffusion of right ideals, as the academy for the training of the future crusaders of freedom.

Need for Expansion of University Education

There are people in responsible positions who seem to think that we have too large a number of students undergoing University education. They speak of restriction of the number of students to be admitted in colleges and universities. It is true that in recent

times there has arisen in India a tremendous demand for higher education. This trend is not peculiar to India. In 1939 the proportion of full-time students in British Universities to the total population was roughly 1 in 837 ; in the academic year 1947-48 the proportion had risen to 1 in 600, and in 1954-55 it was 1 in 500. In the United States in 1939 nearly 1 in 225 of the population was a student in a University or some similar institution of advanced education ; in 1949 the proportion was 1 in 100 of population, the highest in the world. In pre-war Germany the proportion of students in the Universities to the entire population was 1 in 690 and in Russia 1 in 300. In India in 1944 it was 1 in 2,206. But this figure included students of intermediate classes. If we do not take into calculation the students of intermediate classes the proportion of students in the Universities to the entire population in 1951 was 1 in 8536 ; and in 1956 it is in the neighbourhood of 1 in 6207. If we include the Intermediate students the proportions for 1951 and 1956 would rise to 1 in 833 and 1 in 500 respectively. As the Intermediate stage properly belongs to the system of Secondary Education it is desirable to leave them out of calculation. Taken in relation to the extent of literacy in India which is in the neighbourhood of 18% of the population the figures for India would not appear to be dismal. But in relation to the total population the percentage of students in the University could certainly be regarded as highly disappointing. If we were to secure a planned development and reconstruction of India we would need more and more of University education so that the masses may receive the intelligent leadership and guidance in the task of reconstruction that University men alone can provide. It is, therefore, necessary that the Government of India and the state governments should attach greater importance to the expansion of higher education than they have hitherto done.

More Universities

I may be excused if I were to refer to the figures for 1944 relating to some foreign countries, in the absence of the latest statistics which due to shortness of time I could not lay my hands on. There were 12 Universities in England for a population of 41 millions. In Canada there were 13 Universities for a population of 8½ millions ; in Australia 6 for a population of 5½ millions. In the U. S. A. there were 1,720 institutions for education of University type for a population of 130 millions ; while in India there are today only 34 Universities for a population of 360 millions. These comparative figures go to establish that India is not overprovided

with Universities and that with the development of primary and secondary education she will need more Universities and more of University education and not less than she has at present. Even now some of the older Universities (Calcutta is one of them) have grown to mammoth proportions. It is highly desirable that they should be decentralised by the creation of sister Universities. This is a task that should engage the attention of the Union and State Governments at an early date. Whether the Universities of the future should be unitary, federal or affiliating will depend upon the needs of the different States and the financial resources that may be made available.

Defects of University Education

Looking back on the working of our Universities over a hundred years even a casual observer would discover some glaring defects. Dependence on examinations which put a premium on cramming at the sacrifice of original thinking ; overcrowding in classes and deplorable teacher-pupil ratio ; absence of a proper tutorial system ; inadequacy of accommodation and equipment ; failure to inspire the students with a spirit of loyalty to their institutions were some of the outstanding drawbacks from which our Universities suffered. Another glaring defect which has been accentuated in recent years is the volume of wastage in the field of higher education. At the end of the first plan the number of entrants to the Universities and Colleges was 720,000 as compared to 420,000 five years ago. The number of students qualifying in degree and higher examinations in arts, commerce, science rose during this period from 41,000 to 58,000. These figures indicate the extent of wastage. The introduction of diversified courses at the secondary level might succeed in reducing this wastage.

It has to be admitted that the handicaps with which they had to contend were formidable. The education given in most high schools from which the Universities drew their pupils was of an indifferent character. Secondly, inadequacy of state assistance and meagreness of benefactions forced the Colleges and Universities to depend on fee income derived from students.

Responsibility of the State for Education : State Assistance.

In the future planning of University education in India we shall have to guard against the above evils which unfortunately are noticeable even today. The crux of the situation is the assumption of complete financial responsibility by the State. In this direction the policy of the Central and State Governments leaves much to be desired.

The auxiliary educational committee that assisted the Planning Commission in drawing up the educational part of the First Five-Year Plan was of the opinion that the Union and each of the State Governments might allocate 10% and 20% of their respective total revenues for education. In some States total educational expenditure has not yet reached the latter percentage and the Central Government have never yet set apart 10% of their total revenues for education. The experience of the Ministry of Education as related by Maulana Abul Kalam Azad is rather unfortunate. The original demand for Rs. 1080 crores submitted to the Planning Commission by the Ministry of Education had to be scaled down to Rs. 560 crores at the suggestion of the Commission. Even this amount was not vouchsafed to the Ministry. The final allocation for education was fixed at no more than Rs. 307 crores. If our educational edifice is to be constructed solidly the Governments must give up their attitude of reliance on private agencies and must assume direct responsibility for financing adequately the entire educational system of the nation. It is noteworthy that under the Second Five-Year Plan the affiliated Colleges, in many of which the prevailing standards are unsatisfactory will receive the attention of the Central Government through the University Grants Commission.

In this connection attention may be drawn to the fact that whereas in 1939, British Universities received in the aggregate about one third of their income from the British Treasury, in 1955, they received about two-thirds. In addition the Government of Britain also made them tremendously large grants to meet capital expenditure on buildings and equipments In addition to state aid the local authorities made a large number of awards. It may be hoped that the Union and the State Governments as well as the Planning Commission would treat our Colleges and Universities with generosity so that they may really function as organs of civilisation and as schools for the leaders of the nation.

University Degrees and Public Services

The Central Government have appointed a Committee to report on the question whether possession of University degrees should be considered as an indispensable qualification for entry into certain classes of public services. In principle I am in favour of accepting the School Leaving Certificate as a passport to service examinations provided that the standard of this examination is not lowered in the least. But until and unless the existing standard of school education and

School Final Examination is considerably raised we cannot think of adopting this reform.

Autonomy of the University

Financial assistance by the state is sometimes employed as a ground for the exclusive control of the University or the college by the state. Such a system may be regarded as a necessity of totalitarianism. But in a free society State control of Universities is looked upon with horror. Higher education is an obligation of the State, but State assistance should not mean State control over academic policies and practices. Unfortunately, however, there are some States of the Indian Union which do not observe this wholesome principle.

Academic freedom

Freedom of the teacher for self-expression, freedom to speak on any controversial social or political issue are the conditions of free education. Emerson in one of his essays formulates a proposition which is of universal applicability : "If you put a chain around the neck of a slave, the other end fastens itself around your own." Deny freedom of the teacher and the students, establish stringent control over educational institutions, deny to the latter the autonomy to which they are entitled, and you will, before long, find yourselves members of a slave community. This aspect of educational theory is inadequately appreciated by our statesmen and educational administrators. They talk glibly about the libertarian principles upon which the constitution of India is based ; but at the same time they impose unconscionable restrictions on the freedom of teachers and educational institutions on political grounds. They fail to realise that freedom in education is the very breath of free society.

Social and Economic background of University Education.

There is today an increasing realisation of the unfavourable social and economic conditions affecting the student community. According to a survey conducted by the University of Calcutta in 1954, out of a total of 28,800 under-graduate students 13,000 came from families where per capita income was less than Rs. 30 per month and 14,000 from families where per capita income were between Rs. 30 and Rs. 50 per month. The former class live below the subsistence level and the latter on the margin. 88% of the students come from the middle classes who have suffered terribly

due to the partition of Bengal. It was further revealed that 23,600 out the 28,800 students who came under the survey live in houses where they have a floor space barely 24 square feet in area and that also as a part of an overcrowded room. The Calcutta University survey further revealed that 84·6 per cent of the students do not have a study room of their own and that 42·9 per cent only can afford to purchase all the text books.

The nutritional position of College students is equally alarming. 42·7 per cent of the students are of "poor" nutritional status; 34·3% "average" status and 23·0% only are in "good" nutritional status. The findings of the survey further reveal that the diet of the majority (84%) of the Bengalee students has deteriorated considerably as compared with that of 1938. The quantities of fish and milk included in these diets are too low to meet the daily requirements of the body; and butter and fruits have completely disappeared from these diets.

At the other end of the pole are the socio-economic conditions of the postgraduate students of Delhi University reading in Gwyer Hall who were surveyed in April, 1956. It reveals a happy picture of student life that we like to see established all over the country. The survey revealed that only 3% of the students spent less than Rs. 125 p. m., 28% spent Rs. 151—175 p. m., 29% spent Rs. 176—200 p. m. and 18% spent over Rs. 200 p. m.

I believe the conditions under which the students in many parts of India have to live conform roughly to the dismal picture that the Calcutta University survey revealed. But the situation in West Bengal is perhaps the most harrowing. Yet it is a fact that the majority of the best students of the University in India are drawn from the lower middle classes. It is the duty of State to rescue these meritorious students from the terrible conditions which they have to face.

Assistance to Students

In more fortunate countries, 70 to 100% of the University students are maintained at the cost of the State. Let us leave aside Russia and China. In Burma and Ceylon higher education is free. In Britain in 1934-35 nearly 42% of the students in British Universities received financial assistance; in 1949 the percentage of such students was 68. In 1955 three out of every four University students were being aided either from public funds or from endowments. In Oxford and Cambridge the percentage of assisted students had risen

from 43·4 in 1934-35 to 82 in 1949. The financial assistance available to meritorious students in the U. S. A. is more widely distributed than that in British centres of learning. The Government of India, it may be noted, is alive to its responsibilities but the financial allocation for the five-year Plan period for education does not encourage one to believe that the State will be able to assist many students who really deserve assistance. The Government of India have declared that they would award during the year 400 merit scholarships only.

Quality of Students

Some well-meaning critics belonging to the older generations seem to think that the quality of the students of today has deteriorated. It is difficult to believe that all on a sudden the nation has been overtaken by an intellectual degeneration. Dr. Alfred S. Schenkman, Deputy Director of the International Institute of Educational Sciences of Utrecht (Holland) observes : "The Indian student of today is what he is, not because of inherent defects in his character", but because of the "complicated times he lives in." Continuing Dr. Schenkman observed that after having met a number of Indian students, both here and in America and Britain, he was convinced that in "innate ability the student of this country is second to none", "though working, as he does, in an atmosphere of frustration and difficulty, oppressed as he is by the deliberate attempt of the nation to inculcate in him an inferiority complex, if given like half a chance, he usually rises above his environment."

Students' indiscipline

The problem of discipline of the students has worried our elders in recent times. It has been said that the good old days when students were in the habit of respecting their elders are gone. The students today are disrespectful and disorderly. It is also alleged that strikes, slogan-shouting, walk-outs from examination halls are chronic features of modern student life. When I look back on my own times as a student between the years 1914-22 and compare the atmosphere of the Indian student world of those days with that of the present, I have no reason to consider the student life of those days any superior to the modern so far as discipline is concerned. We were as discreet or indiscreet on occasions as the students of today. We also indulged in strikes and protests when we thought that the situation demanded them. But there is a difference. Our boys and girls, nurtured in free India are much more self-reliant, much more self-respecting and they are certainly a thousand times better organised than we could ever be.

We have to recognise that the standard of discipline in the countries is relative to the political and social *milieu*. The social and economic handicap of the student in modern India, the deficiences of the Colleges and the Universities must be taken into consideration before we pass a final judgment on the conduct of the student community. Commenting on the hard life of the student community in Bengal the Saddler Commission wrote as follows : "Surrounded as he is by manifold anxieties and housed under dreary conditions, the student tends to become moody, depressed and absorbed in himself and his prospects. He needs, therefore, more than other students of the same age recreation and diversion. He has few interests to take him out of himself and give him points of contact with other men. He rarely has any hobbies ; possibly because hobbies are expensive both in time and money. Too often he has no older and experienced man to turn to through these years of anxiety and depression. It is not surprising, therefore, if in moments of despondency he falls a victim to uncontrollable excitement, sometimes of the most serious and violent nature." Commenting on these observations Dr. J. C. Ghose, Member, Planning Commission, formerly Vice-Chancellor, Calcutta University, wrote as follows in 1954 : "If at all, the situation has very much worsened. An independent National Government has now been in office for seven years. There is no evidence that we have thought seriously of this problem. Disaster lies ahead if the smiling children of middle class homes are allowed to grow into moody, suspecting and despairing youth, for lack of care, sympathy and guidance. Such youths have been found prone to march to the tune of would-be Dictators and have been instrumental in destroying democratic progress in other lands. May we be spared that experience ! "

Lastly, let us agree about what we really mean by discipline. The discipline of the free is different from the discipline of the slave. The discipline of the academy and that of the military barrack cannot be the same in scope and content. Let us not make a fetish of discipline, valuable though it is. A community of University students who do not protest against grave political injustice or against vital decisions by men in authority imposed in an arbitrary and undemocratic manner is morally dead. Free India has no use for such an inert body of youngmen and women. University students have to be alert and dynamic ; they must keep their mental, moral and active qualities ever alive. Fellow delegates, the secret of disciplne is active sympathy and understanding. The students have not had enough of

it from the authorities and the elders yet. But the students must remember that their movements and organised action should be dignified and marked by decorum and good taste. Unfortunately they occasionally blunder into insolence when they want to be firm. At times they seem to think that the best way to impress an opponent is to insult him. I have no doubt that the majority of the student community deplore such unseemly behaviour.

Medium of Instruction in Universities

Medium of instruction in University education continues to be a controversial issue in some States. The Government of India have generally accepted the wise recommendation of the Radhakrishnan Commission that ultimately, in the interest of educational progress, cultural development and general welfare of the democratic communities of the different States it is essential that University studies should be through the instrumentality of the regional language. The States and particularly the Universities, were given freedom of action in the matter. The controversy centres round the question as to when and how we are going to replace English by the regional language. Some States have already effected a transition from English to the regional language as the medium of instruction. It may be hoped that they have done so after adequate preparation and that the quick transition will not mean a deterioration of standards. In this connection we connot afford to forget the farsighted view of our Prime Minister. In recent times he has clearly stated that for many years to come technical and scientific education will have to be carried on in English. Non-availability of journals and text books, absence of all-India technical expressions of the right type and the poverty of regional languages are amongst the factors that stand in the way of the immediate employment of regional languages as the media of instruction in technical and scientific subjects.

I would place before you, brother and sister delegats, my humble views for your consideration. I would effect the transition by stages. The first stage is a period of preparation in which the University will be engaged in translating the classics in the different subjects ; English will continue to be the medium. The second stage will be marked by bilingualism, that is to say both English and the regional language will be used side by side as media according to convenience. The third Stage will be one in which regional language alone will be used, assisted and supplemented by the English language whenever necessary. The duration of the three periods will, of course, vary from State

to State. For instruction and examination in technical and scientific subjects the first two periods must have to be of longer duration than in non-technical subjects.

Position of the English Language

Along with the above reform steps must be taken for better teaching of the English language. It is needless to point out that in the modern world English language has come to occupy a position of honour on account of its flexibility, receptivity, richness and vigour. It is much easier for Indians to acquire a working knowledge of the language than any other foreign tongue, because we have had a connection with it for nearly two hundred years. I feel strongly that if we cut off our connection with this world language which today is a medium of international contact, in a fit of thoughtless chauvinistic enthusiasm, we shall be diverted from the current of modernism and Indian culture will be rotting in the backwaters of civilisation. In this connection it is noteworthy that the last Education Minister's Conference which concluded its two-day session on September 3, 1956 recommended the compulsory teaching of English at Universities.

It would also be highly desirable to continue to use English as the official language at cultural conferences like the present one. I am afraid if we attempt to substitute any other language for English as a medium at All-India Conferences of a cultural character India will very soon lose her cultural unity and culturally the provinces will fall apart.

Mission of Teachers

Brother and sister delegates, one word more and I will finish. The essence of a University lies in a creative urge. It has its being in an eager endeavour to extend the bounds of knowledge, in the creation of new values that may lead to the expansion of the human mind, social and economic progress and the greatest good of humanity at large. A University exists also for creating an atmosphere favourable to the development of the rational capacities of the young men and women placed under its cultural discipline. It is up to us, the College and University teachers, to pledge ourselves to this noble task. Education and culture are in transition in modern India. We are between two worlds, one dead and another yet to be born. We, therefore, stand at the cross-road of history. Friends, let us work heart and soul with a faith in our mission and wait for the coming dawn the first flush of which is perhaps visible on the horizon. They also serve who stand and wait.

West Bengal College & University Teachers' Conference

Reports of Sectional Conferences

[*For the first time in the history of the Association, a new feature was added to its Annual Conference this year by providing a number of Sectional Conferences and Symposia for different subjects of teaching. These conferences not only dealt with the contents and the methods but also indicated the drawbacks and deficiencies and suggested measures for improvement. The reports of these Sectional Conferences and Symposia are being released in the journal for the benefit of teachers—Conveners, Editorial Board.*]

COMMERCE SECTION

Convener—Prof. Santiranjan Sen

(I) Prof. L. R. Dasgupta who presided over this Section initiated the discussion on the methods of the Commercial education and the desirability of giving greater practical bias to it. From his experience in the field of education and business both here and in England, he observed that the actual practice with the big business houses is to recruit persons with a sound educational background and try to train them up within their Courses. No amount of practical bias in a given direction is possible in any institution to suit the requirements of a particular business with its special problems. According to him, business is less subject to standardisation than the human system or law. Hence, no ready made product for immediate use is possible out of an educational system. So the object of commerce education should be (a) at junior levels (up to Intermediate stage)—only to introduce a commercial bias and to provide a background. Knowledge of the business world and its ramifications ; (b) at first degree level—to acquaint the students with different business functions such as Accounting, Law etc. in a generalised manner and to develop an analytic approach to these different functions with reference to practical illustrative applications so that the recipient may be made aware of the adaptations of principles to practice ; (c) at post-graduate level—to give specialised education and training in the different branches of business functions through intensive methods on the basis of post-graduate certificate and diplomas. The

general post-graduate degree can then be viewed as a course of "sand-witched type" or "co-operative type" for professional business executives or middle cadre management. (e. g. Lucknow, Bihar, Patna)

The above scheme, in the opinion of the President, can be adapted to the integrated course of Commerce education as contemplated by the University.

(II) Further it was felt that there is an imperative need for developing methods of teaching for different subjects at different levels to make education for Commerce both academic and practical, i. e. both for education and training. Merits of the following methods, for instance, may be examined for the purpose.

(a) Teaching as distinct from lecturing with regular use of questions for teaching purposes.
(b) Lecture methods supplemented by discussions and comments.
(c) Seminars.
(d) Case method at senior levels and variations of these at junior levels.
(e) Organisation of practice classes particularly for junior level of students for giving training in correspondence, use of Commercial documents, use of reference books (such as Directives, Telephone guides etc.)
(f) Tutorial system based upon personal guidance approach.
(g) Organised visits with a previous preparation and subsequent follow-ups.
(h) Audio-visual methods and Mechanical aids.

(III) It is felt that some arrangements need be made for the following :

(a) Keeping Commerce teachers abreast of changes in the business world and reference publications.
(b) Refresher courses particularly for part-time teachers.
(c) Securement of Commerce teachers to business houses.

(IV) Some permanent Forum might be formed within the W. B. C. U. T. A. for the present, to bring commerce teachers together for academic purposes for explaining the avenues for implementing the above regarding the contents and methods of Commerce education.

We feel that the examination-based syllabus is not conducive to the development of proper methods of teaching. It was felt that specimen Question Papers should be attached with each syllabus and the aim of each syllabus should be clearly stated. Reports of examiners should be circulated amongst the teaching institutions.

ECONOMICS AND POLITICAL SCIENCE SECTION

CONVENER—Prof. PARIMAL GHOSH

A sectional conference on Economics and Political Science was held on the 20th of August at City College, South Calcutta Branch, Prof. Sudhanshu Guha Thakurta presiding. The convener initiated a discussion on the teaching of economics and political science. All those present, including the president, took part.

The question that took most of the time of the conference was whether the teaching of economics and political science should be academic or purposive. In British and American Universities economics and political science are taught as academic subjects. They form part of what is generally regarded as liberal education. It implies an 'open mind' in regard to particular economic system or political structures, and an insistence that the teachers are not to be propagandists. It further implies a non-utilitarian attitude ; economics in a British University is not taught to help British economy, nor political science to secure improvement of the administration.

In India the teaching of economics and political science was introduced on the model of British Universities. Whatever was important for them became important for us. It was pointed out that the same thing had different significance in the two countries. Even the strictly academic discussions of British economists and political theorists have roots in their society. They are, in fact, abstractions from the reality of British social life. Adam Smith, Marshall and Keynes represent three different periods of British history. Mill did not contemplate the beauty of representative government as an academic exercise ; he was trying to work out solutions to the problems in which he was involved. The so-called academic education of British Universities turns out, in the last analysis, to provide a justification for the existing system. Their 'academic' education has significance in the context of a society that is on the defensive against the challenge that comes from socialism. It is significant that radical thinkers like Laski have not been unconcerned about the implications of the so-called 'Academic Mind" and have urged for freedom from restrictions of the academic world.

It was agreed that in India today we had to evolve an educational policy in a different set-up. So long as the British controlled our economy and our administration our teaching of economics and political science would in any case remain matters of academic interest, in the

strictest sense of the term. But today we are masters of our destiny. India is united in the objective of a planned economic development although we differ in our methods for achieving it. We are all agreed further on the goal of socialism, although we may not share the same views about the means for achieving it. India, again, is playing a tremendously important role in world affairs of which we are all proud.

In this background, all of us agreed that our teaching of economics and political science had to be adjusted to the requirements of our country. Our study of economics and political science ought to be pruposive, in the sense, that they are to help us better to understand and solve the economic and political problems with which we are confronted.

However, what the acceptance of this view would entail in respect of curriculum was a question on which opinion was divided. It was argued by one of the teachers present that the laws of economics and political science had universal validity and that, therefore, the classical literature on the subjects would continue to occupy the present position of importance. A majority were of opinion that although laws of economics were objective laws, they were not independent of the social system. When England becomes socialist many of the fundamental economic laws of today will cease to operate. Marshall and Keynes will still be read, but in the history of economic thought, and not as "the Economics." We may study much of what we do today, but with a difference in emphasis Most certainly there will be a shift of emphasis from mastery over classical literature on economics for the sake of learning to studies having bearing on economic development in an underdeveloped country like ours. Keynesism will not be swallowed, as being in itself a great performance, but will be assessed in all its socio-economic implications to find out how much of it has relevance to a country that is committed to nationalisation as a first step towards socialism. The nature of questions and discussions will change. The students will be asked less to admire the Rule of Law in Great Britain than to consider how India's dumb millions may be made conscious of their fundamental rights.

It was agreed that the working out of details would not be difficult, once the policy formulated above was accepted. Certain tentative proposals were made. In particular the importance of Public Administration, Public Economics and International Relations was stressed. On the question of organising research work in Universities on the lines indicated above, all were agreed. At present research students are

encouraged to choose convenient subjects, with the result that, more often than not, an established thesis simply establishes its author but is of no use to the country. This is evident from the complete indifference of the government and the public to doctoral dissertations, while the authors can make no better use of their degrees than as weapons for winning higher posts.

There is so little scope for research work in our country that we cannot afford to see the meagre opportunities being wasted on the pursuit of useless subjects. Opportunities for research work have to be rationed among those who can undertake to handle concrete problems of the country. A co-ordination between the public authorities and industrial undertakings on the one hand and the Universities and research institutions on the other is imperative. Our research students ought to be encouraged to choose subjects having a bearing on immediate problems of our economy and administration. Mr. Paul Appleby's report or Prof. P. C. Mahalanobis' observations on the administration are *significant pointers*. While India undertakes national tasks of ever greater magnitude new economic and political problems will arise demanding solution. We can make no better use of our research activities than gear them to such tasks.

Speakers did not seem to be on very sure grounds while discussing the medium of instruction. The principle of instruction through the medium of regional language was considered sound. But it was evident that those who spoke had different degrees of doubts about the practicability of implementing this principle. It is the common experience of all teachers of economics and political science that Bengali students of undergraduate classes cannot follow lectures in English. For most of them the English medium creates an unreality about the subject. Ask them in Bengali what they think of linguistic states, they will all have something to say. But lecture to them in English on the principle of national self-determination, they will try to remember without understanding. If on top of this they are asked to answer a question on national self-determination in English, it will for most of them turn out to be a matter of English composition and not of understanding a subject.

However, it was agreed that the practical difficulties ought not to be minimised. There is, first, the difficulty about finding suitable books in regional languages. There is, secondly, the difficulty created by the composition of the classes. Teachers of most Calcutta colleges have to use English along with Bengali for the sake of non-Bengali students.

This is an expedient which cannot be avoided in the smaller colleges at any rate. But in big colleges it is quite possible to have separate sections for non-Bengali students to whom lectures may be delivered in English.

It was agreed that the kind of teaching envisaged would be greatly helped by the separation of econonmics and political science. This separation has already been effected at the M. A. level in Calcutta University. It was agreed that it should be followed up by separating the two subjects at B. A. Pass and B. A. Honours levels also. But in order that students might develop proper perspective, those having honours in economics might be required to take Public Administration as one of their subjects while those having political science might have Public Economics as one of theirs. There was difference of opinion on the question of the desirability or otherwise of separating the two subjects at the Intermediate level.

The question of text-books and of the method of teaching, were also discussed but owing to shortness of time no definite conclusions could be reached. It was decided that the conference would be followed up by further efforts so that we might help our Association, W. B. C. U. T. A., to take a definite stand with regard to the teaching of econnmics and political science.

NEWS & VIEWS

Teachers' Salaries

In his address delivered on the occasion of the opening of the Department of Geology of the Nagpur University, Sri C. D. Desmukh, Chairman of the University Grants Commission said that the Central Government and the Grants Commission had accepted in principle the raising of teachers' salaries but the implementation had been delayed as the universities had no funds. He hoped that long before there would be perceptible improvement in their salaries. Whenever the question of raising salaries of teachers crops us, the same old plea of the paucity of funds is advanced by our administrators who do not hesitate to squander away immense resources on projects and plans of doubtful possibilities. The basic need of educational reconstruction in the present set-up is drafting talents to the profession of teaching and unless and until there is full realization of this fundamental fact, reckless wastage involved in the erroneous approach would be the inevitable consequence in the pursuit of plans sponsored without any imagination and vision of the goal.

Important Senate Decisions :

At the meeting of the Senate of the University of Calcutta held on the 27th September last the following two motions both sponsored by Sri Keshaveswar Bose, General Secretary of the West Bengal College & University Teachers' Association, were passed, *nem con* :

(i) That the Vice-Chancellor and Syndicate be requested to move the West Bengal Government and the Calcutta Tramways Company to introduce students' concession for journeys by state bus and tram car.

(ii) That this meeting of the Senate recommends to the Syndicate that as the system of scrutiny and re-examination obtaining in the University is far from satisfactory, a sub-committee consisting of the Vice-Chancellor as Chairman and Prof. Satish Chandra Ghosh, Justice Ramaprasad Mookerjee, Prof. J. P. Neyogi, Captain P. B. Mukherjee, Prof. P. N. Banerjee, the mover and the Controller of Examinations as convener be constituted to enquire into the working of the system with

special reference to its operation during the last three years and recommend measures for improvement essential to the reputation of the University and interest of the candidates.

Reducing Congestion At Universities

Work will start in the middle of December on selection of 400 university students all over the country who will receive merit scholarships for this year under a special scheme of the Union Education Ministry.

This scheme, which will continue from year to year, is intended to be first step towards the twin objective of helping promising but poor students to pursue an academic career on the one hand and to reduce the present unnecessary overcrowding at the universities on the other.

Under the scheme, 400 scholarships ranging from Rs. 50 to Rs. 100 each—depending on whether the student has taken up the degree, technical or professional course—will be awarded every year.

Results of the previous qualifying examinations and the income of the students' parents will be among the basis of selection. The special claim of the children of the workers will be considered for technical courses.

Curtailment of Academic Rights

The Nationalist Government's proposal to enforce apartheid in South Africa's two big racially "mixed" universities—Witwatersrand (Johannesburg) and Cape Town—has led to widespread protests.

At a mass meeting of students of Witwatersrand Uuiversity, only about 30 supported racial segregation. The rest voted solidly against it. They were supported by most of the staff members of the University.

The Government's move is described by the students' representative councils of both universities as "legislative interference with the fundamental and accepted right of a university to decide for itself whom it should teach."

According to Ministerial statements, the Government intends setting up entirely separate universities for non-whites. Among the non-Europeans, too, there will be segregation : there will be separate universities for Africans, Indians and Coloureds (mixed descent.)

Addressing a lunch-hour meeting of students, Prof. T. W. Thornton-White, a senior member of the Senate of Cape Town University,

said that if the university was weakened in any way it would degenerate not into a second class, but into a tenth-class university.

"You cannot possibly have intellectual honesty and intellectual integrity without intellectual freedom. Any university should be absolutely free to decide what it should think and what it should do. Some universities in the world restrict admissions on religious and political grounds, but they have not got intellectual honesty and integrity. Freedom has either got to be 100% freedom, or it is useless," he said.

Meanwhile, a society for academic freedom has been formed at Witwatersrand University to look after the interests of staff members who are victimized because of their views.

This follows the deportation from South Africa of a Lecturer in English at Rhodes University, Grahamstown. He came to South Africa from England recently. No reason was given by the Government for deporting him.

Subsequently, a Lecturer in English at Stellenbosch University was suspended for using "controversial' subject matter in his lectures.

Teachers' Control over University Academic Work

In dealing with the problem of University administration in the Convocation Address of the Baroda University Dr. John Matthai pleaded with utmost emphasis for greater control of teachers over its academic work. Explaining his view-point he observed : "There were two aspects of the new situation which reacted upon universities. One was about university administration and the other, the content of university studies."

"The application of a democratic system of government to university administration has academic consequences which call for careful consideration. That the chief governing body of a unversity should be representative of the best public opinion cannot be questioned. In the agencies of the university which deal with academic work, there is however no room for representation of public opinion. The distinction which is generally observed in public administration applies also to universities. The legislature in which public opinion is represented is exclusively concerned with matters of general policy but the day-to-day work of the administration and its technical and professional activities are exclusively for the executive whose selection is based on their knowledge and experience and not on their representative character.

"The academic work of a university must be left to the teachers of the university and neither the public nor the government should have any voice in it."

Dr. Matthai further said, "The result of the elective system is that the better class of teachers decide not to stand for election, not caring to face the rough and tumble of hotly contested elections. Important academic positions therefore go to teachers who are interested in office rather than in teaching. This seems to be a fairly common experience among universities in India and I would like a strong public opinion to be formed among those interested in universities against any extension of the elective system where academic positions are concerned."

Dealing with the second point he said, "Another matter on which the changed conditions in India have a bearing was the content of university courses of study. The economic development of India having become a matter of high importance and urgency, technical and scientific studies are assuming an increasingly larger place in our academic schemes. This is as it should be. At the same time it is necessary that the graduates turned out by the universities should be men with balanced judgment and cultured minds who not merely possess knowledge but know how to use it and who understand the art of living in the sense of getting out of life the best and most enduring enjoyment."

But to those who value true education and realise how human values can languish and be destroyed when Governments combine politics with science to force the pace of development, the time has come to utter a warning of the danger ahead, Dr. Matthai said.

Dealing with the present political situation Dr. Matthai said, "The disappearance of the British in India has meant for us the removal of the common obstacle which provided the strongest bond in the national movement in its last stages. Already the sense of nationality has weakened considerably and the forces of separation which for a time had been driven underground are coming back to the surface. India fortunately has a strong leadership which for the present makes up for the steady weakening of the national sense. But it is not realistic nor wise to count upon the permanence of leadership of this quality and strength and I suggest it is time for thinking people who have no political axes to grind to get together and consider how the situation should be met before a crisis is actually upon us.

Examiners' Hostel

On the 17th October last at Nagpur was laid by Sri C. D. Desmukh, Chairman of the University Grants Commission, the foundation stone of the Examiners' Hostel, which is estimated to cost Rs. 75,000. This year 500 examiners of Nagpur University have contributed Rs. 30,000 for the construction of this students' hostel, thus giving an unmistakable proof of the spirit of sacrifice which led to the spread of higher education in the country notwithstanding the lack of sympathy on the part of the Government. The example set by the examiners of Nagpur University, it is certainly not too much to expect, should be emulated by examiners in other Universities, and particularly in Calcutta, so that at least some of the projects of students' amenities may be implemented irrespective of indifference of the State.

Institute For Rural Higher Education

An Institute of Rural Higher Education with a view to developing a system of education which will be suited to the cultural tradition of India and combine with it the knowledge of modern resources for the solution of rural problems has just been set up at Sriniketan by the Visva-Bharati University. The Institute starts functioning from Dec. 1 next.

The Department of Rural Reconstruction at Sriniketan which had been carrying on pioneering work in rural education for over 30 years has been selected by the Council of Rural Higher Education of the Ministry of Education, Government of India, for running the Institute. The Institute will cater to the needs of West Bengal, Assam and Orissa.

One of the aims of the Institute is to produce competent personnel to meet the social, educational, administrative and technological needs of the rural areas. The Government of India would award a Diploma in Rural Services on an all-India basis afer the successful completion of a 3-year Diploma Course in Rural Services. The successful candidates would be eligible for employment in departments of social welfare, civic administration, national extension services, community development works, co-operation, cottage industries, in fact, for all nation-building jobs.

The Institute offers three courses of studies. There is a 3-year diploma course in rural services having compulsory subjects like English, Regional language, Hindi, the Story of civilisation specially relating to machine age, Indian Rural Problems and at least one optional sub-

ject from the following : social work, social education, and public administration. Evidence of having read up to the second year Intermediate class or successful completion of the Higher Secondary Education or its equivalent has to be submitted by the candidates. Then there is a 2-year certificate course in agricultural science, on successful completion of which the candidate will be eligible for employment in the field of agriculture in the general programme of rural development. Those who have passed the Matriculation examination or its equivalent are eligible for admission. The third course is the one-year preparatory course which is designed to prepare students who have not passed the Higher Secondary or its equivalent examination for admission into the Rural Services Diploma Course. All the three departments will have 20 students each in the first year.

Besides Sriniketan, Institutes of Rural Higher Education have also been started at the following places: Jamia Millia (Delhi), Agra, Turki (Bihar), Udaipur, Sansora (Saurastra), Gandhigram (Madras), and Coimbatore. The approximate recurring and capital expenditure on the Sriniketan and seven other institutions is about Rs. 10 lakhs and Rs. 20 lakhs respectively for a period of 5 years.

"Teachers have a great part to play in the struggle for peace.

"Throughout the world we have to teach respect for a number of principles which, today as yesterday, are fundamental to all universal morality. These principles are :

* *respect for freedom of thought, word and belief ;*
* *respect for human life ;*
* *respect for the right of all countries, great and small to have their own life, to develop their own civilisation, without being subject to a master nation ;*
* *the spirit of mutual help, the spirit of creative fraternity between the peoples."*

Control of Secondary Education

A HISTORICAL RETROSPECT

PROF. NIRMAL CHANDRA BHATTACHARYYA

VI. Supersession of the Board of Secondary Education

The Board of Secondary Education established under the West Bengal Secondary Education Act, 1950, composed of 44 members, was superseded on the 11th May, 1954. Having begun to function in October, 1950, the Board was, therefore, in existence for a little less than four years. During the time it succeeded in framing a new course of studies designed to rationalise and diversify the system of secondary education. But before the new syllabus could be introduced it ceased to exist as the result of the sudden action on the part of the Government ordering its supersession. The Board also prepared a draft School Code over which the Government of West Bengal sat tight without any response for about two years. It is also noteworthy that pending Government sanction of the School Code, the Board continued to follow mainly the standing rules framed by the Government and the University regarding secondary education previous to the creation of the Board in 1950. These rules covered curricula, text books, School Final Examination, recognition, grants-in-aid etc. The Board suffered from one serious handicap It had no Inspectorate and therefore, it had to depend on the Inspectorate of the Department of Education. This dualism proved to be a prolific source of friction between the Board and the Department of Education. In fairness to the Board it has to be admitted that the Act itself under which the Board was created did not vest the Board with the power of appointing its own Inspectorate although the School Education Committee (1948) appointed by the Government definitely laid down that the Board should have its own Inspectorate.

The immediate cause of supersession was leakage of question papers. The Government held the Board as such responsible for it. The question that naturally occurs to any one is whether the Board could be blamed for it. Anybody acquainted with the process of examination will agree that it is the executive that handles the

questions ; and therefore, the responsibility really belongs to the executive of the Board. To fasten the blame on the Board would therefore, appear to be highly unfair. The other charges levelled against the Board were injudicious and unfair grant of aid, injudicious recognition of schools and vagaries and corruption in connection with the selection of text books. It is astounding that the Government did not care to enquire into these allegations, nor did they give the Board the opportunity to explain its position in respect of the allegations, as provided by the Act. In a short communique the Government summarised the charges and superseded the Board. It is really extraordinary that a Government that calls itself democratic should have behaved in a manner as they did in connection with this arbitrary act of supersession. The Government by notification appointed an Administrator to take charge of the functions of the Board.

Secondary Education Commission—Mudaliar Commission

In October 1952 the Union Government appointed the Secondary Education Commission to enquire into and report on the position of Secondary Education in India in all its aspects and suggest measures for its reorganisation and improvement, suited to the whole of India and the needs and resources of the country. The Commission which was presided over by the distinguished educationist Dr. Laxmanswami Mudaliar, Vice-Chancellor, Madras University, submitted its report in June 1953. The report was placed before the Central Advisory Board of Education and generally approved. Thereupon the Government of India appointed a Committee to implement the recommendations with minor modifications to suit local conditions varying from State to State.

The Mudaliar Commission proposed the creation of a Board of Secondary Education in all states under the chairmanship of the Director of Public Instruction to deal with all details of education of the secondary stage, both general and technical. This Board, the Commission held, should be composed of persons with wide experience and knowledege of different aspects of secondary education. It was further provided that the Board should not consist of more than 25 members, ten of whom should be experts, possess special knowledge of vocational and technical education. The Board, according to the Commission, was to be an advisory body assisting the Director of Public Instruction when required on all matters pertaining to secondary education. The functions of the Board was to be confined

to (a) the framing of rules regarding conditions of recognition and qualifications of teaching staff; (b) drawing up panels of paper-setters and examiners; (c) appointment of Committees of experts to advise on syllabus and courses of study and (d) framing of courses of study on such recommendations. With regard to the conduct of examinations the Mudaliar Commission recommends the formation of a sub-committee of the Board consisting of not more than five members with the Director of Education or a senior member of the Directorate as convener. This Committee would be responsible for conducting the examinations and the publication of the results. In getting this task properly performed the Director will of course, be assisted by a required permanent staff. The Commission definitely lays down that the Board shall have no executive power which however, shall be vested in the Director, the Chairman of the Board.

Composition of the Board (Mudaliar Commission)

The Mudaliar Commission suggested that the Board of Secondary Education which should consist of not more than 25 members should have on it ten experts, specially conversant with matters pertaining to vocational or technical education. They prepared the following constitution for the Board which, however, could be modified to suit the special needs of the States concerned.

(a) Director of Public Instruction, Chairman
(b) Joint Director of Vocational Education
(c) Director of Industries
(d) One Head of a Polytechnic
(e) Two representatives nominated by Government from the senior teaching staff of vocational schools
(f) Deputy Directress of Women's Education
(g) 4 Headmasters of high schools, including headmasters of multipurpose schools, nominated by Government
(h) 2 representatives of Provincial Secondary Teachers' Association, elected by the Executive of the Association.
(i) Five nominees of the Universities of the region, of whom two shall be professors dealing with technical education;
(j) 2 distinguished educationists coopted by the other members of the Board;
(k) 2 persons nominated by the Department of Education
(l) One Principal of a Training College nominated by Government
(m) One of the Deputy Directors as a Secretary-member.

The composition and functions of the Board as proposed by the Mudaliar Commission though acceptable in parts are, however, unacceptable in their entirety due to certain glaring drawbacks. So far as composition is concerned it may be said that the nomination of Headmasters and of the senior teaching staff of vocational schools would not be acceptable to those who seek to ensure independent expression of views by these elements. Secondly, in the composition of the Board the total number of official and nominated members is in the majority. Above all, the advisory character of the Board takes away all its usefulness. It is likely to undermine the sense of responsibility and seriousness on the part of the Board. No educationist of distinction would feel enthusiastic to serve on a Board which would be a plaything in the hands of the Director of Public Instruction dominating it like a Colossus. It would, therefore, be desirable to invest the Board with real authority subject, however, to the over-riding powers of the Ministry of Education.

West Bengal Secondary Education Commission, 1954.

A little more than three months after the supersession of he Board, and more than a year after the Mudaliar Commission had submitted its report the Government of West Bengal set up a Commission to examine the working of the secondary schools in West Bengal. In a moment of forgetfulness, not at all rare with the West Bengal Government, the Ministry of Education failed to include in the terms of reference the problem of suitable administrative set up arising out of the supersession of the Board of Secondary Education as established under the West Bengal Secondary Education Act, 1950. The Government discovered their own act of omission and added the following to the terms of reference of the Commissions "the Government of West Bengal having generally accepted the main principles underlying the recommendations of the Secondary Education Commission presided over by Dr. A. Laxmanaswami Mudaliar, the Government desire that the West Bengal Commission do also recommend suitable steps for the improvement of the present administrative machinery in conformity with the recommendation of the Mudaliar Commission."

It will appear from the above addendum to the terms of reference that the West Bengal Commission was not given much freedom so far as their recommendation as to administrative machinery was concerned. They were obliged to move within narrow limits because, according to the term of reference, they were to suggest improvements of the administrative machinery "in conformity with the recommendations of the Mudaliar

Commission." The West Bengal Commission, therefore, dutifully endorsed the views of the Mudaliar Commission and recommended the setting up of a Board of Secondary Education mainly with advisory functions. "The executive functions," they suggested, in conformity with the recommendations of the Mudaliar Commission, *will be in the hands of the* Directorate, but the Board will advise the Government on all matters relating to Secondary Education. It must be said to the credit of the West Bengal Commission that at least one of their recommendations was a significant departure from the views the Mudaliar Commission. While the latter suggested that the Director of Public Instruction should be the Chairman of the Board, the West Bengal Secondary Education Commission recommended "a non-official Chairman, the Director of Public Instruction being a member of the Board." As regards functions of the Board the West Bengal Commission made certain suggestions which were also somewhat contrary to the opinion of Mudaliar Commission. The Board that they propose is no doubt called an advisory body but when the Commission describe its functions the Board is given "large powers with regard to such vital matters relating to Secondary Education such as curriculum, text-books, examinations etc." In the context of these substantial powers the nomenclature of advisory board would appear to be inconsistent. But matters like actual conduct of examinations, granting of recognition and aid, and future development of secondary education will be in the hands of the Directorate, though in these, too, the advice of the Board will be sought.

The functions and composition of the Board as proposed by the West Bengal Commission is of cardinal importance in so far as they are likely to be somewhat of a guide to the Government of West Bengal in their future scheme of reorganisation of the machinery of control. The functions of the Board are stated as follows :

(a) to prepare plans for the development of Secondary Education and a better and more equitable distribution of the facilities for Secondary Education in the State ;

(b) to lay down conditions for the recognition of Secondary Schools of different categories and the qualifications of their teaching staff and also for giving grants to them ;

(c) to recommend the recognition of Secondary Schools and grants to them ;

(d) to approve text books for the different courses ;

(e) to appoint examiners, paper-setters etc. for the examinations;

(f) to appoint committees of experts to advise on the syllabus, etc., for the different courses of study and also other Committees as the Board may consider necessary for discharging its functions ;

(g) to frame courses of study in different subjects on the recommendations of the Expert Committees that may be appointed by it for these purposes ;

(h) to lay down rules for the conduct of the General School Certificate Examination and the Higher Certificate Examination or any other such examinations that it may institute, and generally to deal with all matters relating to the conduct of such examinations ;

(i) to consider disputes between teachers and Committees of Management ;

(j) Generally to advise the Government on all matters pertaining to Secondary Education.

It is distinctly provided by the West Bengal Secondary Education Commission that in respect of items (a), (b), (c), (d) and (e) enumerated above the Government will take the views of the Board into consideration before coming to a decision ; while in respect of the items (f), (g), (h), (i) and (j) the Government will act according to the advice given by the Board.

Coming to the constitution of the Board the Commission suggests the following :

(1) Chairman, non-official to be appointed by the Government

(2) Director of Education (ex officio)

(3) Director of Agriculture or his nominee, not below the rank of Deputy Director (ex-officio)

(4) Director of Industries, or his nominee not below the rank of Deputy Director (ex-officio)

(5) Director of Health Services or his nominee not below the rank of Deputy Director (ex-officio)

(6) Chief Engineer or his nominee not below the rank of a Superintending Engineer, nominated by the Government ;

(7) and (8) One representative each of Industry and Commerce nominated by the State Government ;

(9) Principal of a Polytechnic, preferably non-government, nominated ;

(10) Principal of an Intermediate College, preferably non-government, nominated ;

(11) Principal of a Training College, preferably non-government, nominated;

(12) Principal of a Multi-purpose Higher Secondary School, nominated;

(13) to (15) Three Headmasters of whom one should be a Headmistress—all preferably from non-government institutions—elected in the manner described below*;

(16) and (17) Two teachers of High or Higher Secondary Schools of whom one should be a woman, elected in a manner described below*;

(18) and (19) Two representatives of the Legislature—one from the Lower House and one from the upper House—elected by the members;

(20) to (22) Three representatives of the University of Calcutta—elected.

(23) to (25) Three educationists of whom one should be a woman —nominated by the Chairman of the Board.

Since the formation of the existing Ministry in West Bengal in 1952 education particularly, secondary education, has hardly received the attention from the Government that it deserves. The most unfortunate part of the overall picture was the selection of the Education Minister. The choice of the Chief Minister fell on a person who for reasons of his failing health, utter ignorance of matters educational and simple nature came to be completely dominated by the Secretariate. In effect the Minister remained no better than a figure head, a mere rubber stamp used whenever occasion so demanded by the Secretariate. The Education Minister was out of touch with the trend of organised educational opinion in the country. The Secretariate cared little for the University and the vast teaching community in West Bengal who, however, evinced a clear desire to co-operate with the Government for the development of education in all its reaches. The supercilious and uppish attitude of the Secretariate also alienated public sympathy in

*For election of the Headmasters, Headmistresses and Assistant masters and the Principal of the *Multipurpose Higher Secondary Schools when the system is fully* established the following procedure has been suggested by the West Bengal Secondary *Education Commission.*

*The entire State will be divided into a number of regional units consisting of approximately equal numbers of Secondary Schools. For this purpose two or more districts may have to be grouped together. Each region will elect all the five representatives——three Headmasters and two teachers. These representatives of regional units will form the electoral College which will finally elect the five representatives on the Board. It is almost needless to remark that this procedure is cumbrous and not suitable for securing the representation of teachers who might be able to speak for the teaching community of the State.

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general and frequent conflicts arose between the Ministry of Education and the organised body of educational opinion. Even the Chief Minister fell a victim to the unscrupulous flattery of the Secretariat and shut his eyes to all that happened. For the progress of education it was nothing short of a tragedy.

The Secondary Education Commission, West Bengal, consisted of Dr. B. B. Dey, formerly, Director of Public Instruction, as Chairman, Dr. J. N. Mookherjee, formerly Director, Indian Agricultural Research Institute, New Delhi, and Professor A. N. Basu, Principal, Central Institute of Education, New Delhi, member-Secretary. The composition of the West Bengal Secondary Education Commission failed to satisfy the organised opinion of educationists in West Bengal even though the members of the Commission happened to be very distinguished men in their lives. It was argued that the members of the Commission did not possess intimate knowledge of the recent educational conditions in West Bengal. But it has to be admitted that the Commission produced a report characterised by a commendable balance and moderation, handicapped as they were by their limited terms of reference. The recommendations of the Commission were definitely an improvement on those of the Mudaliar Commission relating to the control of Secondary Education in important ways. The Government of West Bengal, however, was not happy over even these moderate proposals and hesitated to publish the report which they feared would lend indirect support to much of the public criticism of Government's policy with regard to Secondary Education in recent years. More than a year after the presentation of the Report the Government of West Bengal in the department of Education adopted a resolution on December 6, 1955, and published the report of the Commission together with the resolution. This procedure that the Government thought fit to adopt was also perverse and arbitrary. The report should have been published first in order to give the public interested in education an opportunity to express their views on it. After having considered such views the Government might have adopted their resolution on it. The Government failed indeed to adopt the democratic procedure which even the British Government in India invariably observed.

That part of the Government resolution which is concerned with the control of Secondary Education in West Bengal lends itself to four criticisms. In the first place the Government do not accept the wholesome distinction that the Commission makes between the functions with regard to which the advice of the Board of Secondary Education is binding on the Government and those in respect of which the advice

tendered may or may not be accepted by the Government. It is very unfortunate that the reasonable and very moderate suggestions of the distinguished members of the Commission in this matter has been disregarded by the Government. The official and nominated members of the proposed Board constitute the majority in the Board. It is by and large a body of experts. The Government, it appears, would not trust even such a Board with regard to matters like appointing committees of experts to advise on syllabus etc, framing courses of study on the recommendation of the Expert committee, laying down rules for the conduct of examinations and disputes between teachers and committees of management. This attitude of suspicion betrays a totalitarian mentality which has been the bane of educational administration in this State. Thirdly, the Government resolution is silent on the composition of the Board. In their policy statement on the proposed Board of Secondary Education they neither reject nor accept the composition suggested by the Commission. The Government took an unconscionably long time to come to a decision on the recommendations of the Commission. But when at long last they do come to the stage of formulation of policy they fail to express their views on a vital proposal of the Commission. Is it an evidence of governmental disingeneousness or is it sheer inefficiency ? Fourthly, the Government have rejected the suggestion of the Commission, namely, of having a non-official Chairman of the Board. The Commission came to this decision having considered carefully the history of Secondary Education in West Bengal. Out of a total of 1411 high schools only 29 are government institutions and as many as 503 do not receive any aid from the State contribution. That is to say that secondary education in West Bengal is largely the contribution of non-official effort. In 1952-53, the total expenditure, the commission argues, on Secondary Education (High and Junior High Schools taken together) in West Bengal was a little over 372 lakhs. Of this amount nearly 259 lakhs, i.e, nearly 70 per cent came from fees and a little over Rs 61 lakhs i.e about 16 per cent came from the State. The remaining 14 per cent came from Local Boards, endowments and other sources. Comparative figures of the percentages of four states establish that the state contribution in West Bengal is the lowest among the four States while contribution from the people in the shape of fees is the highest.

	Percentage of income	Percentage of state group	Income from other sources
Bombay	46	32	22
Madras	50	23	17
Uttar Pradesh	42	24	34
West Bengal	70	16	14

In view of the noble and generous support that secondary education has received from the people in West Bengal, the distinguished members of the Commission came to the conclusion that in this State fairness demanded that the Chairman of the Board of Secondary Education should be a non-official educationist of distinction. The rejection of this wholesome suggestion betrays a desire on the part of the Government to dominate secondary education and cut it off as far as possible from the healthy influence of educated public opinion in the country.

Principles of Control of Secondary Education

The discussions of the numerous proposals for the reconstruction of the system of control of secondary education definitely point to certain conclusions which may be enumerated as follows :

1. The Board should be a comparatively small body capable of coming to fairly quick decisions. But it should not be so small in size as to be incapable of discussing a problem from different points of view. A Board of about 50 members would be too unwieldy ; one of 25 might be regarded as one of workable size.

2. The Board must contain a large percentage of experts who should be able to supply specialised knowledge of trades or vocations. Some of them should be ex-officio members and some may come in by way of nomination. Election seldom secures the representation of really capable persons amongst the experts.

3. The Board should have a non-official majority in order to ensure fearless criticism of Governmental policy.

4. Teachers should be given a substantial representation on the Board. Reservation of seats should be ensured for women teachers. All should preferably be elected directly by the teachers.

5. Headmasters and Headmistress must be given separate representation in separate constituencies.

6. The Board should not be an advisory body but possess real powers subject to the final powers of the Mininstry of Education.

7. The Chairman of the Board should be a non-official educationist of distinction appointed by the Government.

8. In view of the close connection between Secondary and University education, the representatives of the Senate should sit as members of the Board.

9. The legislature need not be represented on the Board. Such representatives ordinarily belong to the party that is in the majority in the Houses i.e. to the party to which the Government belongs. Since the Government exercises substantial control over secondary education the representation of the legislature on the Board may be considered superfluous.

After the new elections a new Ministry of Education will be formed. It may be hoped that the new ministry will be able to emancipate itself from the bureaucratic domination of the Secretariate and adopt a more progressive policy of educational administration than that experienced in this State during the last five years.

APPENDIX

All India Educational Conference

31st SESSION

Presidential Address

(Examination Section)

President

Prof. Raj Kumar Chakraverty
Bangabasi College, Calcutta

JAIPUR, RAJASTHAN

October, 1956

EXAMINATION

(An address delivered by Prof. Raj Kumar Chakraverty, President of the Examination Section, at the thirty-first session of the All-India Federation of Educational Associations, held at Jaipur, Rajasthan, on October 25, 1956)

The problem of examination today exercises the minds of teachers and educationists all over the world. It is intimately connected with our system of teaching and its results. In a broad sense, examinations include oral examinations, conventional (essay) written examinations or tests, objective examinations, and standardized tests. Although the history of written examinations may be traced back to earlier times, they did not become an established practice in India until the introduction of the British system of education in the early part of the 19th century and in the United States until after 1850. Horace Mann (1845) advocated the administration of written examinations and in his arguments urged the use of a large number of questions and suggested the desirability of standardization. Criticisms of written examinations began to appear in America in the eighties. Soon after 1900, the scientific movement in education produced objective evidence of the unreliability of examination marks. The scientific criticism of examinations was paralleled by the Testing movement, and in an article published in 1920 McCall proposed that 'teachers construct objective (new-type) examinations.' The use of such examinations soon became popular. Recent developments include efforts to devise objective exercises to measure the "higher mental processes" as represented in achievement, the improvement of techniques of rating responses to essay questions, and the "comprehensive examination." In such matters, America has made considerable progress. How far her methods can be applied to the conditions of India deserves consideration.

Examinations have been always under a crossfire of criticism from many quarters. Students for reasons, quite obvious, look upon them as the only plague spot in an otherwise Elysian existence

Teachers are critical when they are not sceptical. As a rule—specially if they are idealists—they regard the present essay type of examinations as harmful in the endeavour to educate juvenile minds ; they do not believe that examinations can help the real assessment of merit. Perhaps the only parties to this sad business who are somewhat favourably disposed towards it are the guardians of students ; for examinations give them an understandable measurement of the periodical progress attained by their young hopefuls, and will ultimately provide them with a tangible evidence of merit ensuring some sort of job somewhere. That perhaps would be the opinion of employers if they were approached for it. After all from the practical point of view the opinion of the last two will always clinch the issue in favour of examinations if idealists ever seek to do away with them. By the way, the employers, be they the government or private persons, should remember that there is a new concept of education in the 20th century. "The school of today concerns itself not only with intellectual pursuits, but also with the emotional and social developments of the student, his physical and mental health, his social adjustment and other equally important aspects of his life—in a word, with an all-round development of his personality. If examinations are to be of real value, they must take into consideration the new facts and test in detail the all-round development of pupils." But the present system of examination lacks in such an objective.

It is hardly necessary to enter into a disquisition for and against the traditional method of examinations. We as practical workers in the field of education are only too familiar with them. They are a necessary evil. They deflect the proper emphasis of teaching from the acquisition of knowledge to the cramming of text-books or something worse. They make the task of learning mechanical and monotonous and thus gradually atrophy the mobile powers of an active mind. They confine the attention of the learners to books rather than to subjects of study. Some define examinations in the present context of things as the art not of displaying knowledge, but of concealing ignorance. Examinations have so pervaded the entire atmosphere of our life in schools and colleges that they have become the main motive force for all efforts on the part of students. Unless a subject is included in the scheme of examination, the pupil is not interested in it. Extra-curricular activities which have no direct connection with

his examination seldom rouse his enthusiasm. His guardian is more interested in the success of his ward in examinations than in any sound system of education. The result is teachers have to adjust their method of teaching to the formal success of their pupils in examinations only. It is unfortunate that a teacher or a school is often judged by the number of students who pass the final examination. Notes are dictated in classes as tips for success in the examinations : a dull uniformity rather than originality is encouraged in the average pupil. He concentrates too rigidly upon too narrow a field and thus develops wrong values in education. "Just before the examination, the whole school is siezed with its yearly attack of the examination catarrh. In all departments it is considered necessary to recapitulate for examination. For a couple of months the pupils are transformed into mental ruminants. (Otto Jesperson)." The Mudaliar Commission on Secondary Education characterises our system of education as "very much examination-ridden." The Radhakrishnan Commission also is of the opinion that "if we are to suggest one single reform in University education, it should be that of the examinations."

I have been speaking above of the baneful effects of the essay type or old type examinations. "Essay examinations are usually thought of as consisting of questions that ask students to compare, discuss, explain, give causes, and the like." They still hold sway in our country. They are so called because the answers required to be written in these examinations must be in the form of essays or logical compositions. The imperfections of such an examination are many and varied. Its weakest spot is that it is vitiated by the factor of subjectivity on the part of individual examiners. Therefore the scoring is not reliable. Professor Sandiford refers to "a case in the English Department of the University of Toronto where the same subject was set for an essay in different years. An essay which had secured a mark of 80 in one year was copied by a student in another year and handed in as his own work. The mark given to it in the second time was 39." The Encyclopedia of Educational Research mentions various "findings of investigations which consistently showed a large variability in the scores (marks) assigned to the same paper by different readers. Those of Starch and Elliot for an examination paper in plane Geometry were specially disconcerting. The marks assigned by 116 teachers ranged from 28 to 92." There is a Regulation in many of our Universities regarding

the revaluation of answer scripts for the M. A. and M. Sc. examinations. It provides that if the marks awarded by two different examiners differ by 15% or more, the paper is to be referred to a third examiner for revaluation, and the mean is to be accepted. Even in science subjects the divergence between examiner and examiner has ranged even upto 30%, and in Arts subjects like English, History and Philosophy upto 40% or more. Prof. Sandiford very humorously remarks— "It (pass mark) alters from hour to hour; and does not mean the samething before lunch as after lunch." Such flaws are inherent in this type of the examination itself. We cannot forget that the examiners are human beings and are bound to have idiosyncracies of mood and temper. If we add to this incalculable human quality the large number of examinees involved at the different stages, the want of space and time to conduct the examinations with a minimum efficiency, and the general attitude to examinations both among teachers and students, the problem assumes appalling dimensions.

As a remedy against this old or essay type of examinations, we have the new or objective tests in examinations, highly spoken of and much introduced in some quarters, specially in America. There are various kinds of them, some with instruments also. Both the Mudaliar and Radhakrishnan Commissions have recommended them generally for India. The advantages of this system are not negligible. Students in their answers have to write *on* the question and not *around* the question which must be direct. They have to think outright and give the precise answer and not grope about and evade the issue. The result is that they have not to write answers in lengthy verbal expressions. This provides for economy of time and labour on the part of both students in the course of their answers and the examiners in the process of awarding marks. The element of subjectivity on the part of examiners is almost eliminated for the objectivity of scoring on precise points. Such a test provides further for a wide and comprehensive 'sampling' (i. e. many sample questions are set over a wide area) so that an accurate appraisal of the examinees' knowledge of many matters, briefly answered, can be ensured. "The clever crammer is at wide sea here, because his small stock-in-trade fails to stand him in good stead. The 'swot', the grind, and the shirker are all equally defeated." Critics have however pointed out the disadvantages of this system also. Firstly, it lays more stress upon factual knowledge. Secondly, "it provides no opportunity," as

Prof. Raymont says, "for organising one's thoughts and expressing them in logically coherent form," as it is possible in the essay-type of examination. Lastly, it leaves doors open for desultory guessing. "The examiner cannot tell where knowledge stops and guessing begins." There have been equally strong protagonists of both the old and the new type of examination. But the new type is slowly gaining ground abroad. While comparing the essay and the objective examinations, Eurich says that his "results indicate approximately equal validity" between the two types. The other investigators in the line have concluded that "*carefully* made objective tests and *carefully* scored essay tests may have equal validity."

I have described briefly the different types of examination and their respective merits, chiefly because much attention has been paid to these by the experts who have from time to time reported on our educational problems. But conditions in India are so different from those obtaining in the United States or the United Kingdom that such discussions can have at best only an academic value. A poor country like India cannot afford the elaborate paraphernalia of modern experimental accessories or the luxury of indulging in costly experiments. Our schools and colleges are just emerging from the depressing atmosphere of futility and frustration of a period in which they were looked upon more as coaching classes and houses of detention than as educational institutions. It would indeed be a thousand pities if we allow ourselves to fall into the mistake of merely imitating western methods or grafting an alien system on our anaemic stock. I would, therefore, plead most earnestly with the powers that be that before adopting any new system, however good or plausible, it is of the utmost importance to carry out a thorough scientific investigation into the actual functioning of the system of examination that prevails in this country, to know precisely in what ways our examinations are defective, and in what directions they have to be supplemented or superseded. Let us by all means adopt the methods followed by investigators abroad, but it will be tragic indeed if we adopt their conclusions without going through the premises on which they are based. I am constrained to make these remarks because I see the imitative spirit is already at work in our academic circles in the attempt that is being made to adopt a uniform three-year degree course, irrespective of the considerations not only of its utility but the feasibility of grafting it on our existing system. I am really

afraid that suddenly a fiat might go out of the Central Secretariat that we have to adopt the American system for which the Radhakrishnan and Mudaliar Commissions have pleaded so enthusiastically without introducing conditions which alone can make it worth-while. I may suggest, however, to the Ministry of Education in India that they should set up a research machinery of their own under experts who are skilled in the preparation and use of objective tests and understand the principles and procedures thereof. They may, by way of experiment, encourage some schools and colleges to get acquainted with the concepts and techniques of objective testing or to undertake the work of making regional standardized tests for use in their institutions. The Radhakrishnan Commission recommended "a thorough study of the whole movement (of objective tests) and adaptation of their results to Indian requirements." This 'thorough study' and 'adaptation' should be done first, before anything of a general nature is adopted.

It goes without saying that the introduction of radical reforms in the structure of our examination will not be effective without the same in that of our educational system. One very desirable reform in our examination system should be that in the final assessment of pupils, 50% of the credit should be given to the internal tests, as evidenced in the records of schools and colleges, and the remaining 50 % to the results of the external or public examinations. There should be a golden mean, as Prof. Sandiford suggests, between the two types of examination, old and new. But this of course is not possible unless our teachers are relieved of the inordinate pressure of class-routine, and enabled to function in a freer atmosphere without financial handicaps, where they have the necessary time and opportunity to supervise the work done in the class and evaluate the degree of progress attained by their pupils. For it is only then that the class-records are a sufficiently reliable check on the subjective vagaries of external examiners, and can be used to do away with too many examinations that deflect the emphasis from teaching to coaching. The certificate of a properly equipped school or college under the control of single-minded and trained teachers would then have the validity not only with the employing authorities, but with the educational institutions who admit students to higher courses of study.

If and when the objective tests are introduced to a large extent in Indian schools and colleges, I do not think they can rule

out the essay-type of examination altogether. "Inspite of its defects," says the Radhakrishnan Commission, "it has some advantages too. It is, besides, the only method in vogue at present and thoroughly well known to all in the field of education. The introduction of the new method of objective testing, measurement and appraisal will take some time. Even when introduced, it will, we feel, have to be supplemented by the essay-type of examination. It is therefore essential to see that the obvious defects of this type are minimised as far as possible." For the present, therefore, I would be satisfied if the existing system of examination were made as effective as possible.

I suggest therefore that immediate steps should be taken to ensure reasonable justice for all examinees by providing that examinations are free from the defects arising from hasty or careless assessment, due either to the shortness of time allotted or the vagaries of individual examiners. A check might be put upon these if the Head Examiners refer doubtful or marginal cases to the schools or colleges for a report of the work done by the students there. In the alternative, the schools and colleges should be asked to send a report of their internal tests to the examining authorities along with the students' applications for the final examination. These reports may be consulted for an adjudication on the doubtful cases referred to above. The Head Examiner might also have a small committee of experienced examiners to assist him in revising the work of the more eccentric of our examiners. For the examination of a large number of candidates in the various school leaving examinations conducted by the Secondary Boards, I would also advocate delimitation of zones under separate examining authorities.

As regards the problem of a hurried assessment of answer-scripts, it is no doubt to a large extent due to the present method of requiring an examiner to go through a large number of scripts within a short time. If a limitation were put on the number of papers to be examined daily by an individual examiner, there would be no likelihoood of jaded nerves or frayed tempers caused by environmental variations affecting the marking of papers. I would say half-a-dozen is the limit that any mortal may be expected to go through in the course of a day without having his mental equilibrium upset. For this a larger number of examiners may have to be appointed and more time allotted to the examination of papers than is usually done. I should say this is well worth doing.

A point more germane to the issue is the elaborate methods of invigilation that are adopted at our examinations. They have been in existence ever so long that we take them for granted too easily. Inspite of them, adoption of unfair means in various examination centres has been an oft-repeated scandal. It does seem to me that such police-methods are singularly out of place in our academic life. Far from helping the immoral to become moral, these methods only make them more subtle in their ways. Trust begets trust, and I am personally prepared to face the prospect of an immediate increase in the adoption of unfair means at examinations, by doing away with such methods and trusting to the honour of our students. I have reports from one or two examination centres that when examinees were interspersed in a hall with wide space and inter-communication among them was rendered difficult and vigilance relaxed, the attitude of students towards the examination showed a marked improvement. I have reasons to believe that that will be the experience elsewhere once we boldly make the experiment. The true object of education is not to repress immoral tendencies in our students, for repression is always temporary in effect; but to draw out their innate virtues which will have a lasting effect on character. If you only consider that under the present system of invigilation the adoption of unfair means has tended to increase, you will, I hope, be less apprehensive of giving the contrary method a fair trial. Further, if the candidate knows that for his result in the final examination, he will get 50% of the credit from his class-records and the other 50% from the external examination, his tendency to take to unfair means will diminish.

I shall now proceed to offer some comments on the setting of question papers. At the post-graduate stage, when we are conferring on students the highest academic recognition, certainly paper-setters as well as examiners should be selected freely from external sources and other universities. But in the undergraduate and school stages, I think we should depend more on the teachers in direct touch with their students. It may not be possible to introduce a thorough objective testing in our examinations immediately for reasons already discussed. But an approach may be made by setting questions that demand straight, precise and pointed answers. Such questions will give no scope to rhetorical elaboration that deceives the examiner or to literary flourishes that coax his goodwill. They can be set only by those who are actually in touch with the work

done in the classes and know the real extent of the student's knowledge required by the syllabus. After all, the object of examination is not to probe into the depth of a student's ignorance, but to assess the extent of his knowledge. An external paper-setter is often misled into demanding too much or too little ; he is either too general or too particular. It may be said that the external paper-setters,— for the schools drawn from the colleges ; for the colleges drawn from the University Post-graduate teachers— are favoured everywhere. But the point is not whether they are favoured everywhere, but whether there is any special sanctity attaching to the system. The only argument that I have heard against the appointment of internal examiners is the fear that teachers will 'tip' their favourite students or those belonging to their particular institutions to the detriment of others. I totally and emphatically disagree. The mentality of suspicion that brands students as sharpers at examination halls looks upon teachers as tipsters in the class-room. As of our students, so of our teachers ; so of everyone with whom we have to deal, Emerson's words to me are a gospel and a guide : "Trust men, and they will be true to you ; treat them greatly and they will show themselves great."

Before I conclude, I would like to offer a few suggestions to make the present system of examination more effective and less terrifying to students who often stake their all for it. *Firstly*, the number of external or public examinations should be reduced to a minimum. There should be no public examination at the primary or secondary stage except the one at the completion of the secondary school course. *Secondly*, in promoting a student to a higher class, more emphasis should be laid on the periodic tests and other records in the schools and colleges than on the result of the annual examination itself. *Thirdly*, in adjudging the result of the final examination of students in a school or college, at least 30% of the marks should be earmarked for the internal tests or class-records, and 70% for the external examination. *Fourthly*, the system of compartmental examination should be introduced at the final public examination. *Fifthly*, examinations should as far as possible be taken in compartments, subject-wise and time-wise. *Sixthly*, "a University degree should not be required for Government administrative services. Special state examinations for recruitment to the various services should be organised and should be open to whosover cares to take them." *Seventhly*, the regional language should be made the

medium of instruction and examination in schools and colleges which may, to a great extent, avoid the necessity of cramming a foreign language like English. Students belonging to other states should be allowed to choose their centres of academic authority and take their examinations thereunder in their own language, as advocated in a Congress resolution two or three years back. In other words, the system of extra-regional affiliations should be admitted, say, for the Madrasis in Calcutta or the Bengalees in Delhi. *Lastly*, an atmosphere should be created in our educational institutions that education is not "a race whereof examination marks the last spurt, and wherein success or failure is the final seal and stamp of worth," and that an examination is only a means to an end, viz, to give the student a stimulus and inspiration for his all-round development, stage by stage, as a result of his examinations.

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